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IN THE SENATE OF THE UNITED STATES.

MAY 5, 1886.—Ordered to be printed.

Mr. BUTLER, from the Committee on Territories, submitted the following

REPORT:

[To accompany bill S. 980.]

The Committee on Territories, to whom was referred the bill (S. 980) granting right of way to the Cinnabar and Clark's Fork Railroad Company, having carefully considered the same, make the following report:

This matter was referred during this session of Congress to the Committee on Railroads, who, on the 9th of March last, made a unanimous report, which your committee here present as a part of their report:

The Committee on Railroads, to whom was referred the bill (S. 980) granting right of way to the Cinnabar and Clark's Fork Railroad Company, make the following report:

They have given this bill very careful consideration, and report a substitute back to the Senate, and recommend its passage.

This company was organized under the laws of the Territory of Montana to construct a railroad from Cinnabar, the terminus of the Livingston branch of the Northern Pacific Railroad, on the Yellowstone River, about 5 miles north of the northern boundary of the Park, to reach the Clark's Fork mining district, in Southern Montana, lying a few miles north of the northeast corner of the Park.

This mining district has been known and referred to in many official communications from Government officers as a mining district of exceedingly great promise, of both gold and silver, extending 12 miles east and west and 6 miles from north to south.

It appears that the portion of the Park through which the railroad would pass contains no object of public interest to attract the attention of tourists, and that the preservation of the timber and game of the Park is more hindered and the game more extensively depredated upon by the present and increasing travel upon the wagon road than it would be under the operation of the proposed railroad. For most of the distance it would be confined to narrow ravines along the water-courses, not frequented by either game or travel; and when not in such ravines, it would follow the general route of the present wagon road.

The Park extends about 65 miles from north to south and 55 miles from east to west. Its boundaries have not been surveyed. Two maps have been submitted. If the map of the Geological Survey be accurate, the railroad would run at an average distance of about 3 miles south of the northern boundary of the Park, reaching, at one point, by a sudden turn of the East Fork, an extreme point of about 6 miles south of that boundary and for a very short distance. The total length within the Park would be about 25 miles.

If the map of Gallatin County, Montana, said to have been made from actual survey, be correct, the railroad would at no point penetrate the Park more than about 3 miles, and at an average distance of not exceeding $1\frac{1}{2}$ miles, and for a distance of about 10 miles.

The committee further desire to state that they recommend this bill as a commercial necessity only, and not to be regarded as a precedent for granting railroad privileges to any railroad company for tourist travel.

That these views are fully sustained by the evidence before your committee is shown from the following brief extracts from documents submitted, and all of which are in the hands of the committee for the inspection of all who desire to examine them.

Lieut. Daniel C. Kingman; United States engineer in charge of improvements in the Park, in his report of 1883, asked Congress for an appropriation of \$20,000 for the improvement of the wagon road in the direction of Clark's Fork mines, and says that the route is off the regular line of tourist travel; that the mines are said to be of unusual richness; that a large mining camp is growing up at Cooke City; that the present road is in a very bad condition—almost impassable—at certain seasons, and there seems to be no way of improving it unless it is done by the National Government; that being in the Park it does not belong to any county, and those people can hardly be expected to build it for themselves.

Hon. H. M. Teller, Secretary of the Interior, in answer to an inquiry from Hon. George G. Vest, says:

"The principal objects of interest to tourists are in portions of the Park remote from the route above mentioned. To refuse to afford to those interested in the development of this mining region the benefits of the cheaper means of transportation a railroad would supply merely because the railroad must enter the Park, and when its construction would not tend to subvert the purpose for which the Park was set aside, or interfere with the enjoyment of its wonders, would be unreasonable. In view of the apparent necessity for its construction, I do not know of any sufficient reason why the desired right of way should not be granted."

Mr. Henry Gannett, of the United States Geological Survey, who made the exploration of the northern portion of the Park, says:

"The road proposed is the only one practicable to reach these mines. The ridges of the Shoshone and Yellowstone Range trend in a general north and south direction, and any railroad attempting to reach these mines from the north must cross them nearly at right angles. These mountains are extremely rugged, and contain very few passes practicable even for pack animals. In my judgment a railroad on this route cannot injure the Park as a pleasure resort."

General Anderson, chief engineer of the Northern Pacific Railroad, in a letter of May 10, 1884, says:

"Any route to the Clark's Forks mines leaving the Northern Pacific Railroad east of Livingston must cross the main range of the Snow Mountains, which is very high and cannot be surmounted without the use of grades of probably 150 feet per mile. The Snow Mountains are noted for their heavy snowfall, which commences early in autumn and lie late in the spring. The only feasible route is by way of the Yellowstone River."

In a letter of January 28, 1886, to Hon. Senator Cullom, he says:

"The route up the Yellowstone River is the only practicable route."

He adds "that to reach the Clark's Forks mines by any other route would require a railroad to surmount an elevation of probably 9,000 feet above the sea-level, which cannot be surmounted except at great cost and grades exceeding 200 feet to the mile."

Numerous letters from other engineers confirm the statements of General Anderson that there is no practicable route to reach the Clark's Forks mines except by way of Yellowstone River, and the route proposed by this bill.

The people of Southern Montana are intensely interested, and have submitted numerous letters, memorials, and reports of public meetings, earnestly urging that the right of way be granted to this road, and the committee are of the opinion that it should be granted.

The same bill was introduced in the House of Representatives by Mr. Toole, the Delegate from Montana, and referred to the Committee on the Public Lands, and that committee on the 23d of last February made exhaustive and unanimous report with favorable recommendation, which report your committee adopt and submit as a part of their report.

[House Report No. 672, Forty-ninth Congress, first session.]

The Committee on the Public Lands, to whom were referred the bills (H. R. 2881 and H. R. 3756) granting right of way to the Cinnabar and Clark's Fork Railroad Company, respectfully report:

That they have given these bills very careful consideration, and unanimously recommend the passage of the accompanying substitute bill. They have reached this conclusion after careful review of the facts.

The company was chartered in 1884, under the laws of Montana, to construct a railroad from Cinnabar, a point on the Livingston branch of the North Pacific Railroad, to Cooke City, in Southern Montana, a total distance of about 56 miles.

Cooke is the central point of the New World, or Clark's Fork mining district. Over 500 mines have been located and well prospected, and many of them in successful operation, within the range of a few miles from that point. This district is one of

remarkable richness, and your committee believe it to be of national importance that its development should be promoted. It is located in a mountainous region, wholly inaccessible by any practicable route except that proposed in the bill. The turns of the river necessarily carry the road into the northern border of the National Park, running out of it again to reach its terminus in Southern Montana.

The Park at present is 65 miles in length from its northern to its southern boundary, and will be over 75 miles if the bill to change its boundaries now pending in the Senate should become a law.

By the Government exploration under Professor Hayden, in 1878, the railroad following the course of the river would lie close along the northern boundary of the Park, reaching, by a sudden bend of the East Fork to the south, a point about 6, and not exceeding 7, miles below the northern boundary, and this for only a short distance. If, however, the county map of Gallatin County, said to have been made from an actual survey of the river in 1884, be correct, the river, so far as it would be followed by this railroad, lies outside of the Park for most of its distance; and the farthest point south which it would reach would not be more than 2 miles below the northern boundary and for a distance not exceeding 10 miles; but whichever map be correct, there is nothing of interest except these mines to attract tourists or travel of any kind to that part of the Park which this road would traverse. It would be merely a mining road for ores and bullion and mining supplies.

That these mines are of great value is beyond all question. A large number of mines are being already worked. Three smelters are in partial operation, but the expense of transportation is so great that they must be abandoned if greater facilities be not supplied.

The only access to this district is by a rude wagon road, which for more than half its distance is upon the natural surface of the ground, picking its way among rocks and stumps, and over marshes, and up and down the sides of steep ravines, where teaming is often dangerous, and so expensive as practically to preclude the working of the mines.

It has been represented to the committee that an experimental shipment of about 150 tons of ore from the Black Warrior and Elk Horn mines, at Cooke City, was made to Omaha, the nearest reduction works. The ores averaged \$112.50. The cost of reduction was \$16 per ton and the transportation was \$92 per ton, giving to the miner \$4.50 per ton to cover mining and other expenses. With railroad facilities, the total transportation would not have exceeded \$45 per ton.

The committee deem it appropriate further to say that they favor the preservation of the Park for the purposes for which it was set apart, but they are unable to see how any such purposes can be interfered with by granting a right of way to a road which merely dips into the northern border of the Park for a short distance, in a part of it which contains no objects of interest, and where no other practicable route exists by which those mines can be reached.

The bill carefully guards the interests of the Park by prohibiting the taking of any material for construction outside of the limits of the right of way, which is limited to 100 feet each side of the center line, and there is no timber in that portion of the Park along the proposed route.

The following extracts from official and other sources are submitted as part of the evidence on which the conclusions of the committee are based:

Daniel C. Kingman, Engineer Corps, U. S. A., in charge of improvement of Yellowstone National Park, in his report for 1883 (Senate Ex. Doc. 47, part 3, page 10, Forty-eighth Congress, first session), recommends an appropriation of \$20,000 "for the repair of the Clark's Fork road from Yancies via Soda Butte to the boundary of the Park, in the direction of the Clark's Fork mines," and says:

"This route is off the ordinary line of tourist travel. The mines, however, are said to be of unusual richness, and a large mining camp is growing up at Cooke City. The inhabitants of this region receive their mail from the terminus of the railroad at Cinnabar, Mont., over this road. In the same way all their supplies, tools, and machinery reach them, and the products of their mines must seek the market by this route.

"The present road is in a very bad condition, almost impassable at certain seasons, and there seems to be no way of improving it unless it is done by the National Government. Being in the Park, it does not belong to any county, and these people can hardly be expected to build it for themselves."

On the 29th of February, 1884, Hon. H. M. Teller, Secretary of the Interior, in reply to an inquiry from Hon. G. G. Vest, says:

"It [the Cinnabar and Clark's Fork Railroad] would therefore extend into the Park but a comparatively short distance along its northern border. The principal objects of interest to tourists are in portions of the Park remote from the route above mentioned, and the operation of a railroad over this route [the same now asked for] would not, therefore, detract from their beauty or grandeur, nor would it interfere with the

game of the Park to a greater extent than the wagon teams by means of which communication between the points named is now carried on.

"It is known that a flourishing mining camp has been established at Clark's Fork, and valuable and productive mines have been opened at that point.

"To refuse to afford those interested in the development of this mining region the benefits of the cheaper means of transportation a railroad would supply, merely because the road must enter the Park, and where its construction would not tend to subvert the purpose for which the Park was set aside, or interfere with the public enjoyment of its wonders, would be unreasonable.

"In view of the apparent commercial necessity for its construction, I do not know of any sufficient reason why the desired right of way should not be granted."

Mr. Henry Gannett, of the United States Geological Survey, who made the exploration of the northern portion of the Park under Professor Hayden from which the map of 1878 was compiled, in a letter dated February 19, 1884, submitted to the committee, says:

"The road proposed is the only one practicable to reach those mines. The ridges of the Shoshone and Yellowstone range trend in a general north and south direction, and any railroad attempting to reach these mines from the west must cross them nearly at right angles. These mountains are extremely rugged, and contain very few passes practicable even for pack animals. That at the head of the East Fork, which it is proposed to use for this railroad, is the only one available for this purpose.

"In my judgment a railroad on this route cannot injure the Park as a pleasure resort. It traverses a region in which there are no objects of interest, with the exception of the third cañon of the Yellowstone and of the Shoshone Mountains, which differ in no essential particular from similar scenery elsewhere."

General A. Anderson, chief engineer of the Northern Pacific Railroad, in a letter of May 10, 1884, says:

"Any route to the Clark's Fork mines, leaving the Northern Pacific Railroad, east of Livingston, must cross the main range of the Snow Mountains, which is very high, of very steep descent on north side, and cannot be surmounted at reasonable cost without the use of grades of probably 150 feet or more per mile. The Snow Mountains are noted for their heavy snow fall, which commences early in autumn and lies late in the spring. It is doubtful if a road could be operated except at an expense far beyond any possible return of cost. To conclude, a railroad to Clark's Fork mines across the Snow Mountains will be so costly of construction, and so difficult and expensive to operate, that it will never be built. The only feasible route is by way of the Yellowstone River. It would pass across a corner of the National Park but little visited by tourists, and wholly devoid, I believe, of those natural features calculated to attract them."

In a letter of January 28, 1886, in reply to further inquiry, General Anderson reiterates his statement that the route up the Yellowstone River is the only practicable route, and says:

"There is no other practicable route existing for a road to the Clark's Fork mines. Several others have been suggested, the principal ones being to build up the stream known as the Clark's Fork from near buildings, and the other to ascend the Boulder River. It is perhaps possible to build a railroad on one or the other of these lines, but from information derived from Army officers who have had occasion to pass through the country, I am confident no practicable route exists. Clark's Fork runs for many miles in a cañon through which, I believe, no one has ever been able to pass.

"The Clark's Fork mines are situated on the headwaters of a stream entering into the Yellowstone River in the National Park, and to reach them through or by the Clark's Fork would require the line to cross the main divide between Clark's Fork and the Yellowstone River, the elevation of which is probably about 9,000 feet above the level of the sea, and cannot be surmounted except at great cost, and by using excessive grades, exceeding 200 feet to the mile.

"The route by Boulder River is equally bad, if not worse. It would require crossing the Snow Mountains, one of the most rugged ranges in Montana, and covered with perpetual snow."

The richness and value of the Clark's Fork mining district have been known for many years.

Professor Hayden, in his report for 1872, says:

"About the sources of the Middle Fork and Clark's Fork are some very interesting silver mines, not yet developed to any extent, but the ore, which is galena, looks well; but the mines are so difficult of access, so far from market, and the seasons are so short, that their value is nominal at this time."

He adds:

"Still, the rapidity with which this western country develops under the stimulus of rich mines and railroads is so great that these far away ores may become valuable sooner than we could anticipate. A regular mining district has been formed here and numerous lodes staked out."

Subsequently, and several years after the Park had been established, the New World or Clark's Fork mining district was legally established, taking in 12 miles from east to west and 6 from north to south. The Government has received and continues to receive the price of all mining claims located therein. Good faith seems to require that the Government, which has established this mining district and invited purchasers, and received the proceeds of sale, should afford to such purchasers reasonable access to their property by railroad, which is the only practicable means, and by the route proposed in this bill, which the committee is satisfied is the only possible road by which these mines can be reached.

These views are confirmed by letters from several other engineers familiar with the country, all of whom concur in saying there is no other practicable route to reach the Clark's Fork mining district except by way of the Yellowstone River.

Many letters, memorials, reports of public meetings, &c., have been submitted to the committee, showing an intense interest of the people in Southern Montana, and most earnestly praying that the right of way through the Park be granted for this road.

All these papers, and others not cited, and the maps referred to, are in the hands of the committee, and accessible to all who desire to inspect them.

The committee believes the present bill carefully guards the Park against any abuse, fully protects the public, and requires the road to be built and running within three years, or the right of way granted shall be forfeited.

In the Forty-eighth Congress the Committee on Railroads, of which the distinguished Secretary of the Interior was a member, made a unanimous favorable report, substantially agreeing with the report of the said committees quoted herein.

The Committee on Pacific Railroads in the House of Representatives in the Forty-eighth Congress made a like favorable report unanimously.

Maj. George O. Eaton, a retired Army officer, in a letter under date September 7, 1885, to the House Committee on Expenditures for Indians and the Yellowstone Park, in speaking of the Boulder, Clark's Fork, and East Fork routes, says:

The writer has been over all these routes, and is familiar with them so far as the railroad aspect presents itself. The Boulder route may be disposed of by saying that it is, according to the general use of language, impossible. As to the route up the Clark's Fork from Billings, it is to be noted, in the first instance, that of all the advocates of this route there is, so far as is known, but one of them who has in person been over the route so strongly advocated, and that man is well known to be personally interested in preventing the railroad from going up the Yellowstone. This route (up the Clark's Fork) has been fully reported upon by General Anderson, chief engineer of the Northern Pacific Railroad, and it is therefore necessary for me to say but very little; but from Billings to Cooke, over any route that a railroad could follow, the distance would be at least 135 miles, and probably more. From Billings the first 40 miles would be of easy construction, but upon entering the mountains at that point difficulties would be encountered that would have no parallel in this country, unless an exception be made in the case of the Denver and Rio Grande Railroad. This road can be built in the sense that it is not impossible, but it will take at least \$4,500,000 to \$5,500,000 to do it, which is a sum entirely beyond our ability to raise. Turning now to the route up the Yellowstone River to the East Fork of the same, thence up the East Fork and Soda Butte Creek to Cooke, we have the only route available in any moderate use of the word.

The distance from Cinnabar to Cooke over this route is not to exceed 60 miles, and has been estimated to cost, when built and equipped, something less than \$1,000,000. It is not much to say that if we are ever to have a railroad into Cooke it must go over this route, because it is the only one that nature in the least favors, and it certainly must be a well-nigh evident fact that the easiest and most practicable way to reach any point must be to follow up the water-courses to which its streams are tributary. All that the miners of Cooke want is a railroad. It would suit them just as well to have it come from Billings, but they never can get such a costly road built. They therefore are obliged to come to Congress for assistance, praying that honorable body to remember at the same time that these mines were discovered and claimed before the National Park was established. As to whether a right of way be granted for a railroad, or part of the Park on the northern boundary be segregated, so that the line of the proposed road will be on the public domain, the miners make no choice. Either of the ways named will suit them, or any other that will permit the road to be built up the Yellowstone as proposed.

As to talk that is understood to have been made before your honorable committee

that there is no ore, nothing to justify a railroad being built to Cooke, it is simply idle talk made again by men who never have been there and who do not claim that they have. The writer alone has several thousand tons of merchantable ore lying on his dumps, and it all comes by simply running tunnels and sinking shafts. The ore on either side of these tunnels and shafts is not disturbed, nor a pound of it put on the dumps.

General Sherman, in his report for 1883 (Ex. Doc. No. 1, part 2, Forty-eighth Congress, first session) to the Secretary of War, says of the Park:

In superficial extent the Park is 60 by 55 miles, making an area of 3,300 square miles, much larger than the State of Delaware, and almost 3 times as great as Rhode Island. The Park reservation is evidently too great. Beyond the preservation of the natural curiosities there can be no good reason for any reservation whatever. These curiosities cover comparatively but little of the reservation, and to this the area should be razed, throwing all outside open to settlement like other public lands. This would permit private enterprise to construct roads, make bridges, and do all other things necessary for the convenience and accommodation of a curious public. The lands of the Park, outside of what would be necessary for the preservation of the curiosities, is good for grazing and other purposes, and would be at once taken up, and soon good roads and other accommodations would follow, thus bringing these great wonders of nature within the reach of people of ordinary means. The Government has not and probably never will appropriate sums sufficient to provide for the wants of the public over so vast an area, and so long as it is a reservation private enterprise cannot enter it. The original idea in having it so large was to make of it a preserve for game. This has proved an entire failure. There is no game there now, and never will be so long as multitudes resort there for the purpose of sight-seeing. Wild game and multitudes are incompatible elements and cannot exist together.

Sixty-six citizens of Cinnabar, in their memorial to Congress praying for the passage of this bill, say:

The said route must, of necessity, follow said river in its course through the Yellowstone National Park. There are no objects of interest along that portion of the river which such railroad would traverse, and a railroad constructed on such route would be available only for business purposes, and would not interfere with any plan of the Government to maintain the Park for all the purposes for which it has been set apart. The development of the Clark's Fork mining district is of national importance, and cannot be accomplished without railroad facilities, and without the right of way herein prayed for. No railroad to said mining district can be built, nor can the northern portion of Wyoming Territory east of said Park be developed.

A committee appointed by a mass meeting of the citizens of Bozeman, Livingston, Cinnabar, and Cooke City addressed a memorial on this matter to Hon. J. K. Toole, Delegate from Montana, in vigorous and business-like terms. Among other reasons for this road they say:

Thus, after years of legal occupation of and work and expenditure in the district, we yet at the end of another season find ourselves unable to utilize the same, though the district is without doubt one of the richest in America, and one of the most extensive (20 square miles) in the world.

We recognize the objections existing against the cutting down of reservations, or of permitting construction of railways over them; but we ask no cutting down with any speculative object in view, nor do we ask any right of way except in the legitimate interest of the citizens of Montana as connected with said mines. It is capable of complete demonstration that the part of the Park through which the road should pass is utterly valueless to the Park; it is a portion thereof which will never be sought by tourists; it is almost wholly destitute of timber; access by wagon road across it to said mines, it must be evident, from the nature of things, must result in far more injury to timber-growth by fires and consumption than from a railway; destruction of game occupies a like position; not a tie can be cut upon it for railway construction; saw-mills need not injure the streams (those already in the district have not done so); smelting and milling operations cannot affect them; and in no way can the building or operating of a railway result in injury to the Park, or to public or private interests.

The right to be in location within said district has been and is, as already stated, recognized by the Government; that right was legally initiated prior to the establishment of the Park, and certainly the right to a means of exit for the production of said district is as sacred and as inalienable. The right to go in and out with sup-

plies and production by wagon road is also recognized; and as a railway would prove the only practical means for transportation, and a less dangerous and objectionable means, as stated, it cannot be seen why objection should exist.

For all possible routes there are but three. One, by way of the Boulder, is from 110 to 120 miles of length, but it is impracticable, and so difficult that its expense would deter the most venturesome, and it is not known who would think even of estimating upon it.

That from Billings, Mont., is not, it may be, impossible, but its length is from 135 to 145 miles over a terrible country; its construction would cost, it must be, four to five millions of dollars, and we refer with confidence to the report of General Anderson, as chief engineer of the Northern Pacific Railroad, upon the subject. Who would build this road is not known. It occupies a like position with the Boulder route first mentioned, and, with it, is out of the question.

Lastly, the Yellowstone route, that suggested herein, is the only practicable, available one. From the end of the mentioned Park branch of the Northern Pacific Railroad is but (from Cinnabar, its present terminus) 51 miles. The road would run thence up the Yellowstone River to its East Fork and up the latter and Soda Butte Creek to Cooke City, located within said district, now public land.

Attention is asked for the suggestive and important fact that during the entire period of occupation of this district, notwithstanding persistent effort otherwise, the only wagon route established is that by way of the very course laid down herein as the "Yellowstone route." Experiments otherwise have proven failures. From the point of practical entrance into the district of the Billings route, it would be almost, if not absolutely, impossible to reach the main mining ground, and we especially court investigation of the statements herein made upon this point of route.

In all this matter we assert that we seek but a way in and out. No plan by which to secure land or coal, or timber, or anything else, from the Park, is concealed in this matter. We are not seeking the cutting down of the Park; we are not making any raid against or upon that reservation: we but ask and desire the right to construct and operate a railroad from Cinnabar to the Clark's Fork mines, that we may utilize the labor and investment of years. We see our way to the construction of the desired railroad, and await the requisite Government consent.

Your committee have had before them a petition from four hundred citizens of Montana, another from eighty citizens, another from forty citizens, together with letters and affidavits from more than thirty citizens acquainted with the country, several of them engineers, all testifying to the fact that the route proposed in this bill is the one desired and expected, and the only route practicable to Cooke City for railroad.

In consideration of the abundant and strong testimony in favor of this bill, your committee agree with the other committees reporting this measure in the conclusion that this bill, as amended, should pass, and so recommend.

VIEWS OF THE MINORITY.

Mr. MANDERSON, from the Committee on Territories, submitted the following views of the minority, to accompany S. 980 :

The undersigned beg leave to dissent from the views of the majority of the Committee on Territories, in reference to S. 980, granting the right of way to the Cinnabar and Clark's Fork Railroad Company.

This bill, as originally introduced by the Senator from Minnesota, Mr. McMillan, and referred to the Committee on Railroads, provided for the granting of a right of way to the Cinnabar and Clark's Fork Railroad Company, a corporation organized under the laws of the Territory of Montana, from Cinnabar, by way of the Yellowstone River and the East Fork thereof and Soda Butte Creek, to the Clark's Fork mining district. The said right of way was to be 100 feet on each side of the center line of said railroad, except at such points, not nearer than 7 miles from each other, as may be designated by said railroad company for station buildings, depots, machine-shops, side tracks, turn-outs, and water stations, at which points the right of way shall be 200 feet in width on each side of the center line of said railroad, and 2,000 feet in length. The original bill also provided that timber and other materials found upon such right of way might be used by such company. The Committee on Railroads, to whom the bill just described was referred, reported the same back with material amendments, which will appear by a reference to their report, No. 204. By reference to said report, the following language will be found:

It appears that the portion of the Park through which the railroad would pass contains no objects of public interest to attract the attention of tourists, and that the preservation of the timber and game of the Park is more hindered and the game more extensively depredated upon by the present and increasing travel upon the wagon-road than it would be under the operation of the proposed railroad. For most of the distance it would be confined to narrow ravines along the water-courses, not frequented by either game or travel; and when not in such ravines, it would follow the general route of the present wagon-road.

The Park extends about 65 miles from north to south and 55 miles from east to west. Its boundaries have not been surveyed. Two maps have been submitted. If the map of the Geological Survey be accurate, the railroad would run at an average distance of about 3 miles south of the northern boundary of the Park, reaching at one point, by a sudden turn of the East Fork, an extreme point of about 6 miles south of that boundary, and for a very short distance. The total length within the Park would be about 25 miles.

If the map of Gallatin County, Montana, said to have been made from actual survey, be correct, the railroad would at no point penetrate the Park more than about 3 miles, and at an average distance of not exceeding $1\frac{1}{2}$ miles, and for a distance of about 10 miles.

We suggest that these views are based upon a misapprehension of the facts. Instead of the distance through Yellowstone Park traversed by this projected railroad being from 10 to 25 miles, it will be seen, by reference to the letters hereto attached, from those having full knowledge of the facts, that the distance traversed is from 40 to 60 miles, and that

the probabilities are that the length of the projected railroad will be about 56 miles.

The undersigned, believing that the construction of this road would be decidedly injurious to the purposes for which the Park was established, and that there are other routes over which a railroad can be constructed from points on the Northern Pacific road to the Clark's Fork mining district, report adversely to the bill, and urge that it be indefinitely postponed; and in support of this view calls careful attention to letters from the Hon. L. Q. C. Lamar, Secretary of the Interior, Lieutenant-General Sheridan, Maj. J. W. Powell, Director of the Geological Survey, W. H. Phillips, esq., special agent for investigating Yellowstone Park, of the Interior Department, Prof. Arnold Hague, of the Geological Survey, Lieut. Dan. C. Kingman, Corps of Engineers, United States Army, and others having knowledge of the facts. A careful reading of these letters from gentlemen who have personal knowledge of the facts will, we believe, quite conclusively show that it is extremely undesirable that a railroad, as projected, should be permitted to be built.

We first attach the letter of the Secretary of the Interior, and the accompanying documents, all of extreme value in the consideration of this bill:

DEPARTMENT OF THE INTERIOR,
Washington, April 22, 1886.

SIR: I have the honor to acknowledge the receipt of your communication of the 3d instant, inclosing Senate bill 980, and report No. 204, in relation to "granting the right of way to the Cinnabar and Clark's Fork Railroad Company" through Yellowstone Park reservation, with request that this Department will furnish for the use of the Committee on Territories all of the data and information in its possession. The delay in responding is explained by the inclosed documents, which were obtained mainly through correspondence incident to your inquiry.

The Park, as you are aware, was established by act of Congress, March 1, 1872, and in the language of that enactment (sec. 2474, R. S.) "dedicated and set apart as a public park or pleasure ground for the benefit and enjoyment of the people; and all persons who locate or settle upon, or occupy any part of the land thus set apart as a public Park, except as provided in the following section, shall be considered trespassers and removed therefrom."

"SEC. 2475. Such public park shall be under the exclusive control of the Secretary of the Interior, whose duty it shall be, as soon as practicable, to make and publish such regulations as he may deem necessary or proper for the care and management of the same. Such regulations shall provide for the preservation from injury or spoliation of all timber, mineral deposits, natural curiosities, or wonders, within the Park and their retention in their natural condition. The Secretary may, in his discretion, grant leases for building purposes for terms not exceeding ten years of small parcels of ground at such places in the Park as may require the erection of buildings for the accommodation of visitors; * * * he shall provide against the wanton destruction of the fish and game found within the Park; * * * he shall cause all trespassers upon the same to be removed therefrom, and generally is authorized to take all such measures as may be necessary or proper to fully carry out the objects and purposes of this section."

In the second session of the Forty-seventh Congress (see p. 626, vol. 22, Statutes at Large) the following legislation looking to the preservation of the Park in its "natural state" was had:

* * * "Two thousand dollars to be paid annually to a superintendent of said Park, and not exceeding \$900 annually to each of ten assistants, all of whom shall be appointed by the Secretary of the Interior, and reside continuously in the Park, and whose duty it shall be to protect the game, timber, and objects of interest therein; the balance of the sum appropriated [\$40,000 was the total amount] to be expended in the construction and improvement of suitable roads and bridges within said Park, under the supervision and direction of an engineer officer detailed by the Secretary of War for that purpose.

"The Secretary of the Interior shall lease small portions of ground in the Park, not exceeding ten acres in extent for each tract, on which may be erected hotels and necessary outbuildings, and for a period not exceeding ten years; but such lease shall not include any of the geysers or other objects of curiosity or interest in said Park, or exclude the public from the free and convenient approach thereto; or in-

clude any ground within a quarter of a mile of any of the geysers or the Yellowstone Falls, nor shall there be leased more than ten acres to any one person or corporation; nor shall any hotel or other building be erected within the Park until such lease shall be executed by the Secretary of the Interior, and all contracts, agreements, or exclusive privileges heretofore made or given in regard to said Park or any part thereof are hereby declared to be invalid; nor shall the Secretary of the Interior, in any lease which he may make and execute, grant any exclusive privileges within said Park, except upon the ground leased.

"The Secretary of War, upon the request of the Secretary of the Interior, is hereby authorized and directed to make the necessary detail of troops to prevent trespassers or intruders from entering the Park for the purpose of destroying the game or objects of curiosity therein, or for any other purpose prohibited by law, and to remove such persons from the Park if found therein."

A similar appropriation was made by the Forty-eighth Congress, second session (see Statutes at Large, vol. 23, p. 499): "For every purpose and object necessary for the *protection, preservation and improvement* of the Yellowstone National Park."

I quote the statutes in this connection to show the spirit of the legislation laid in regard to the Park, and that the dominant idea in Congress in reference to the matter has been the preservation of the wilderness of forests, geysers, mountains, &c., so to speak, and the game common to that region, in as nearly the condition in which we found them as possible, with a view to holding for the benefit of those who shall come after us something of the original "Wild West" that shall stand while the rest of the world moves, affording to the student of nature and the pleasure tourist a restful contrast to the busy and progressive scenes that the story of the past of American enterprise gives assurance will ere long be repeated in the growth in population and civilizing influences of the Territories of Idaho, Wyoming, and Montana, that now border on the Park, and that even now are aspiring to the dignity of Statehood.

The data of surveys in this Park and the region immediately north of it is too meager to enable this Department to answer with any degree of positiveness your inquiry as to whether there is any other practicable route for the proposed road except the one comprehended in the provisions of the bill in question, but I would respectfully suggest in this connection that the line proposed by the "Cinnabar and Clark's Fork Railroad Company," is a creature of the draughtsman rather than of the engineer, and is not, so far as I can ascertain, a deduction from instrumental survey, supported by notes of topography and levels, and estimates of excavation, fill, and grade.

Several other routes are suggested by military and scientific authorities of high repute, whose letters and reports upon the subject I send you, as practicable and feasible, and though these lines have not been subjected to the test of instrumental scrutiny, they are at least as familiar to engineers, geologists, and border hunters as the one seeking recognition in Senate bill 980, and while longer and perhaps more expensive in the demands of construction, I do not think that that question should have consideration in view of the aims and objects of Congress in the legislation of 1872 and subsequent years, and the hopes engendered in the hearts of the lovers of science and nature by that legislation, that at least "one brand should be saved from the burning" of a restless civilization, before whose relentless advance the forests, plains, and even the mountains in their wild aspect, are disappearing, particularly when for the purposes of this legacy to prosperity a reservation was made of rugged rocks, bitter waters, inaccessible forests, boiling fountains, arid plains, and on the whole, a region that, but for its selection by the Government for the people of to-day and the future, would have been rejected by all men and corporations animated by thirst for gain or the selfish frenzy of speculation.

The Lieutenant-General commanding the Army, in a communication that I inclose, says:

"The railroad from Cinnabar to Cooke City, following the route proposed, will traverse about 45 miles of the Park and be at the road's most southern point, the junction of Soda Butte Creek with the East Fork, about 12 miles south of the north line of the Park. Except near the Mammoth Hot Springs, the road will not pass in the immediate vicinity of any of the objects of public interest, but it would pass through some of the best grazing and meadow lands in its northwestern corner."

The general, in the above frank recital, gives some good reasons for the company's anxiety to secure a line through the Park, and excellent reasons in my opinion for rejecting the application. The fact of the line penetrating twelve miles south of the northern border, its passing in the vicinity of the Mammoth Hot Springs, and its virtual capture of some of the best grazing and meadow lands are all strong arguments against the granting of its application if the theory that suggested the reservation still holds good, and comprehends the maintenance of its original and present characteristics.

The conclusion of General Sheridan's letter shows that he also holds this opinion, for he says:

"A railroad through any portion of the Park is, however, not in harmony with the

objects for which this reservation was created, and if permitted in this case, will, I much fear, be used as a precedent by the advocates of the various other roads already projected through different sections.

"Under the present circumstances the objects of the Park are being well fulfilled. The game is collecting in large numbers, and if not disturbed, will probably continue to do so in the future. These conditions should then, as far as possible, be maintained.

"With reference to other lines of communication, that by Boulder Creek may prove possible. This route was traversed by an officer of the Army in 1878, who then reported that he deemed a railroad by this route practicable."

Lieut. Daniel C. Kingman, first lieutenant of Engineers, United States Army, in charge of preparing roadways, bridges, and Government improvements generally at Yellowstone National Park, in a letter under date of March 25, replying to a communication from the editor of "Forest and Stream," expresses surprise that his report of 1883 "should be quoted as in any way favoring the construction of railroads for any purpose whatever within the Yellowstone Park."

"I have," he says, "always been opposed to the construction of railroads in the Park. I have given this subject the most careful thought and study, and I should regard their introduction as the most serious injury that could be inflicted on the Park, and the construction of the Cinnabar and Clark's Fork Railroad would be especially deplorable, because it seems so unnecessary.

"There is every reason to believe that the route of the Stillwater (lying wholly outside of the Park) is a better one for a railroad to the mines than that via the Yellowstone River and Soda Butte Creek."

Mr. Arnold Hague, geologist of the United States Geological Survey, in charge of the National Park Division, responding to a letter from this office covering the inquiries submitted by your committee, under date of April 6, says:

"The Clark's Fork mining district lies just outside the northeast corner of the Park, high up in the mountains, near the headwaters of the Stillwater and Clark's Fork Rivers and Soda Butte Creek.

"The district, as yet, is small and undeveloped. It may have a brilliant future before it, but it has not been satisfactorily demonstrated. Every mining engineer knows that the number of mining locations held has very little to do with the importance of a district. I first visited it in the autumn of 1883; I again visited it in September, 1885, and found that the mining developments had progressed far less than I had been led to suppose. So far as I was able to judge upon careful inquiry, I think there were not more than a hundred miners actively employed in the district, and most of these were doing what is known as prospecting work. In no one mine were more than three or four men at work. Considerable ore had been taken out, but mostly of a very low grade, that will have to be smelted in the district. From present developments I fail to see how this district could support a railway.

"No careful surveys for railway routes have as yet been made, although much misinformation has been scattered broadcast about the impracticability of reaching the district in any other way than through the Park.

"Three routes, however, have been proposed: One by way of Stillwater River, from Stillwater, on the Northern Pacific Railroad; one from Billings, Mont., by way of Clark's Fork; and one by Soda Butte and the Third Cañon of the Yellowstone River, passing through the Yellowstone Park for about 50 miles, nearly the entire length of the road.

"It has been stated that the mines are all on Soda Butte Creek, and to reach them a railway from north or east would have to cross a high mountain range. This I consider an error. Although Cooke City is situated on Soda Butte Creek, it is only a small settlement, and inconveniently located for nearly all the recent mining developments of the district. All the more important recent developments are situated either on the opposite side of the watershed, on streams tributary to the Stillwater and Clark's Fork, or else within a few hundred feet of the summit of the range.

"With a railway, a mining town would be equally as well situated on either the Stillwater or Clark's Fork.

"From all I can learn, I am inclined to believe that the route following the valley of the Stillwater will prove practicable. I have not examined it personally, but more accurate surveys have been made of it than of the other lines. I am told it is feasible to build the road to within 15 miles of Cooke City. All the newest mining locations are from 3 to 6 miles from Cooke City, high up in the mountains. This road would be about 54 miles in length. Stillwater, the junction of the branch with the Union Pacific Railroad, is about 125 miles nearer Saint Paul than Cinnabar.

"I have personally examined the Clark's Fork Valley, for 40 miles east of Cooke City, and I am of the opinion that if the mining interests demand a railway, a road could be built from the mines to Billings, Mont., which would be far more serviceable than a road through the Park. There is on this route one very rugged place

known as Clark's Fork Cañon—a deep gorge 6 miles in length—but I am told it is quite possible to avoid it.

"This route seems so feasible that accurate surveys should be made before granting a right of way through the Park. I am well acquainted with the country through which the railroad would have to pass going from Cooke City to Cinnabar. My own work compelled me to study the third cañon carefully, and I have no hesitation in saying it would be a very costly matter to build the road for 18 or 20 miles from Gardiner to the East Fork of the Yellowstone River.

"It has been estimated by the friends of the Cinnabar and Cooke City Railroad that it can be built for \$1,000,000. It seems to me that if the output of the mines at Clark's Fork can stand such an expense, either of the other routes should be chosen.

"In my opinion, many persons are interested in obtaining this right of way through the Park who desire to use the road for the purpose of transporting passengers who visit the Park in the summer. Having the only right of way granted by Congress, they anticipate receiving large revenues from tourists. Upon its completion we should see glowing inducements held out to tourists of a ride through the third cañon of the Yellowstone and the charming valley of the East Fork.

"The granting of one or two hundred feet on each side of the track would necessarily include Soda Butte Spring, the water of which is already much sought after by many people, and the only one in the Park which has yet been found to possess curative properties.

"In my opinion, it would be a mistake to allow this spring to pass beyond Government control.

"I cannot but believe the establishment of a railway in the Park would prove a permanent injury to the reservation and tend to subvert the purposes for which the Park was originally set apart.

"The danger from forest fires would be very great and the large game would disappear, as it has everywhere else, with the appearance of railways.

"With a railway in the Park, 50 miles in length, with stations every 7 miles, disagreements difficult of settlement would immediately rise between a powerful railway corporation and the management of the Park.

"A railway means the settlement of large numbers of persons in the Park, over whom the Department of the Interior could have but little control. It would require constables, justices, and courts, and finally the people would ask for political privileges.

"It should be the aim of the Department to permit as few people as possible to reside permanently in the Park, other than those engaged in the accommodation of visitors. A railway in the Park is, in my opinion, the beginning of the end. The demands of others, claiming equal rights, would grow with years, and, in time, the Park would have to be thrown open to settlement.

"By preserving the Park intact for the next ten years, it will take such a firm hold upon the country that the people will never consent to its desecration to purely personal ends.

"It belongs to Maine and Florida quite as much as to Wyoming and Montana, but in time these Territories will derive the greatest benefits."

Mr. W. H. Phillips, late special agent of this Department in the Yellowstone National Park, in his report (Senate Ex. Doc. 51, Forty-ninth Congress) says:

"Interested parties have for some years brought to bear a constant pressure upon Congress and the Department to induce action in favor of a railroad through the Park. This railroad is sought ostensibly for the purpose of bringing to market the ore from Cooke City, a mining camp adjacent to the northeast boundary line of the Park.

"Apart from the consideration that a railroad is not needed in the Park, and that it would deface its beauty, is the further consideration that the preservation of the game and the forests would be unattainable should a railroad be allowed within the limits of the Park."

Writing to the Department, under date of April 6, 1886, Mr. Phillips says, referring to the project suggested by Senate bill 980:

"The road would run through one of the wildest portions of the reservation, within which the herd of buffalo, sole remnant of the once mighty herds, now roams.

"Nor need I dilate upon the damage of the forests which would result should the bill become a law. Owing to the dryness of the climate during most of the year, forest fires are very easily caused, and once started do immense injury. A railroad would be the means of greatly increasing the danger to the forests from fires."

In the report of the House Committee on Expenditures for Indians and the Yellowstone Park to the present Congress it is said:

"The preservation of the forests which clothe with verdure the valleys, rugged declivities, and mountain peaks of the whole region is of special moment. It is made very clear by the practical and scientific views presented on this subject in the testimony that the regular flow of water in these regions is greatly dependent on these

forests. It is, therefore, in the judgment of the committee, of the highest moment that these forests should be protected from destruction either by fire or the ax. To this extent, having in view at once the beauty of the park as a delightful resort of the people, and the value of the great streams of water that issue from the mountains, as well as the benign influence of the forests on climate and health, this Park should receive the special care of the Government."

In the communication from Mr. Phillips of April 6 he refers as follows to the influence of a railroad in centering population in the Park:

"* * * If a railroad is allowed, the difficulties which the Department already labored under as to the management of the Park will be greatly increased. It will be impossible to avoid more or less settlement along the line and the introduction of a large number of people connected with the road. New rules and regulations will have to be made, and when made, with the present force under the superintendent, their enforcement will be very difficult, if not impossible.

"The objects contemplated by Congress have in a great measure been attained. Not only from all portions of this country, but from all portions of the world, the people have come to behold the wonders of nature contained in the Park and to seek escape from the trammels of civilized life surrounding them at home. The main wonder and joy to them has been to behold everything that was beautiful in the Park in a state of nature; that the fair picture contained no blot of man's hand.

"By the bill under consideration all this is proposed to be changed. For the benefit of a private corporation, the pleasure ground of the whole people is to be invaded, the face of nature is to be scarred with a railroad, and one of the fairest portions of the Park surrendered to a corporation for that purpose, upon which may be erected, in the language of the bill, 'station-houses, depots, and machine-shops.'

"This railroad will run fifty-six miles through the Park, penetrating the wonderful cañons, cutting through the forests, and over the finest grass country in the Park, and pursuing its course along the beautiful Yellowstone River.

"That a railroad would be destructive of the beauty of the Park will be conceded by all. No less clear is it that the project is opposed to the main purpose for which the Park was set apart. Already a railroad reaches the very gates of the Park, and since it has reached that point, they would have it penetrate within the 'sacred precincts.'"

Under date of April 10, 1886, Maj. J. W. Powell, Director of the United States Geological Survey, forwarded a communication to this Department, which I inclose herewith, replying to some of the inquiries suggested by your letter of the 3d instant. He also sends a map of a portion of the Yellowstone Park covering the location proposed in Senate bill 980, which I transmit for the information of the committee. The map "embraces an area extending across the Park from east to west, from the northern boundary southward about 20 miles."

Major Powell discusses the various routes that have been suggested for a railroad to the Clark's Fork mining district, as follows:

THE YELLOWSTONE ROUTE.

"It starts at Gardiner, on the northern boundary of the Park. The present terminus of the Park branch of the Union Pacific Railroad is Cinnabar, about 3 miles from Gardiner. From Gardiner the line follows up the Yellowstone to the mouth of its East Fork, thence up this creek to where it passes into a district east of the Park, in the neighborhood of the Clark's Fork mining district. The route thus traced through the Park is about 46 miles. The extreme southerly point of the route, near the mouth of Soda Butte Creek, is a little more than 11 miles from the northern line of the Park. The altitude of Gardiner is about 5,400 feet above the level of the sea; the altitude of a practicable site for the terminus of the road in the mining district would be about 7,500 feet; therefore, the altitude to be gained in running from Gardiner to the terminus of the road would be about 2,100 feet, and the length of the line would be from 50 to 55 miles. For fifteen miles of its course the construction would be somewhat difficult and expensive from the fact that the road must run through a narrow and broken cañon. The remainder of the road would be of easy construction."

THE STILLWATER ROUTE.

"There is a possible route from Stillwater, a station on the Union Pacific Railroad, up Stillwater River to its headwaters in the Clark's Fork mining district, but the terminus would not be the same as by the Yellowstone line, but on the other side of the 'divide.' This line would pass up a narrow valley, through a number of broken and difficult cañons. The length of the route would be from 65 to 70 miles. The altitude to be overcome in this distance would be about 3,930 feet."

THE CLARK'S FORK ROUTE.

"There is still another possible route by which this mining district may be reached, that extending from Billings up Clark's Fork, which stream heads in the mining district and gives it its name. The length would be from 125 to 130 miles. Along the route there are a number of cañons presenting obstacles to the road. One cañon, especially, is said to present great difficulties, and it may be necessary to run the line outside of the cañon along the mountain slopes in order to overcome this difficulty. The altitude to be overcome by this route is about 4,385 feet.

"There are some considerations in favor of this route from the fact that its terminus is farther east on the Northern Pacific Railroad, and from the further fact that along its course valuable *deposits of coal* are found."

Commenting upon the various routes, and reasoning from the meager engineering data at hand, Major Powell says:

"Altogether the Yellowstone Park route is shorter; can be constructed more cheaply per mile; has less elevation to overcome, and could be maintained and operated at much less expense than either of the other routes."

These conclusions would have force and weight if addressed by a chief engineer, employed on preliminary survey, to the board of directors of a company contemplating an economical investment in railroad construction between given points, but they are not entitled to consideration in this connection, where but two questions, it seems to me, present themselves: First, the protection of the people's heritage, the Park, from an intrusion that threatens its destruction; and, second, the furtherance of the interests of speculators, individual and corporate; and if I understand the object of the inquiry submitted by your honorable committee to this Department, it is to ascertain the possibility of meeting the wishes of the railroad projectors who have in view certain mining possibilities, or probabilities, without trenching upon the precincts of the Park, heretofore so carefully hedged and guarded by Congress and this Department. In this connection it seems to me we have no right to consider the questions of distance, grade, or cost, particularly as instanced here, where all are within rational and feasible bounds. Such surveys and data as we have—and the information is as meager in regard to one route as another—demonstrate the practicability of connecting the Clark's Fork mining district with the Northern Pacific Railroad without traversing by rail any portion of the Park; and, this being the case, it is not for the Department to make estimates of relative cost or consider the matter of relative speed as dependent upon ease of grades, in an instance where speed is not a consideration, and the grades are not excessive as compared with those of many mining and commercial lines in mountain countries, being about 56 feet to the mile on the "Stillwater Route," and about 33 feet on the "Clark's Fork Route," while it would average about 38 feet to the mile on the "Yellowstone Park Route." It must be observed, also, that the distance for the Park route is estimated as nearly as possible upon air line assumptions, while in respect of the others, wide latitude is taken to cover deficits in information and exploration. Further, if we consider the fact that the Park route extends for all its length, except about 15 miles, through a country where "the road would be of easy construction," and yet obtains in an estimated 55 miles an altitude of 2,100 feet, the inference of enormous grades to be accepted, somewhere, suggests itself.

In answer to your inquiry, transmitted through this office as to the importance of the mining district in question, Major Powell says:

"No thorough information exists in this office relating to the importance of the mining region at Cooke City. It is known that mineral lodes have been discovered in this district of country and have been worked to some extent. None of the workings have been extended to great depths, but many small workings have been made, and it is believed that much ore is now piled upon the ground. But the exploitation of the region seems not yet to be sufficient to warrant expression of opinion in relation to the ultimate extent of the mining industries that may be developed therein.

"The early discoveries were on the head of Soda Butte Creek; later discoveries are on the head of Stillwater and the head of Clark's Fork. The most important mine is the Great Republic, which now has much low-grade ore on the dump-pile. Cooke City is a small settlement at the center of the mining district. If a railroad be built by any one of the routes its terminus will probably be lower down, and a new town will thus probably be established.

"Gardiner is situated on the Yellowstone River, about 5 miles from the Mammoth Hot Springs, on the north line of the National Park. It is a small settlement of log cabins and frame shanties. It derives its trade at present from the settlers living in the valley and from people visiting the Park.

"Cinnabar, the present terminus of the Park branch of the Union Pacific Railroad, is about three miles away.

"With regard to the effect such a railroad would have upon the interests of the Park, the Director does not feel that he is entitled to express an opinion."

It will be seen that the importance of the mining interests in this district are far from being demonstrated by any data in the possession of either the military or scientific authorities of the Government, and that doubt is expressed by both as to the ultimate importance of Cooke City as a mining town in the event of the most favorable outcome of the pending "prospectings"; but admitting its importance and future greatness, is it not possible that the researches of the near future may disclose like deposits of mineral wealth in the Territory of Idaho immediately bordering on the west line of the Park, and in Wyoming Territory near its south and east lines, and will not the demands that now come up to Congress in behalf of the "Clark's Fork mining district," in Senate bill 980, if favorably considered, be annually echoed from other mineral districts with equal claim to recognition, until the Park shall be, if equal justice be done to all petitioners, webbed with the arteries of intercourse and commerce, and cease to exist as the creature of the legislation of 1872, that "dedicated and set apart as a public park and pleasure ground, for the benefit and enjoyment of the people," this rugged, romantic, beautiful wilderness and wonderland?

In connection with other documents forwarded herewith, I send you a number of extracts from a representative journal of the American lovers of field sports and students of forestry, the Forest and Stream, to show the deep interest that is being taken in the question under discussion by an immense class of our most thoughtful and intelligent fellow-citizens, and the anxiety and suspicion with which they regard the overtures and representations of the corporations now besieging Congress for authority to penetrate the Park with railroads.

In the event, however, that the judgment of your committee shall so far incline to the repeal or amendment of the legislation of 1872 and subsequent Congresses as to favor the granting of the right of way proposed in Senate bill 980, I would respectfully suggest that the grant be restricted to such limits as are absolutely essential to road-bed and slopes of "cuts" and bases of "fills," the measurements of which will be amply demonstrated when the "line of definite location" shall have been run, and the office estimates based thereon shall have been made—if such estimates are submitted with the "plats of actual surveys" to this office for approval—in lieu of the maximum width of 200 feet—"100 feet on each side of the center line of said railroad"—asked in the bill.

The probability is that most of the work contemplated will be rock grading, and in such event the cuts will be at a slope so light in the interest of economy as to deflect little from the perpendicular, and, in rare instances, will require for road-bed and slopes a right of way of more than 25 or 30 feet from center; while in the matter of "fills," trestle-work and iron structures will be largely used, never requiring a greater breadth of base than 50 feet.

This amendment is suggested rather in the interest of timber preservation than economy of land, and with a view to guarding against that appearance of utter desolation usually incident to a forest right of way from which the timber has been cut or culled for a distance of a hundred feet on either side.

If the grant is to be made upon the simple ground of affording an outlet for the products of the mines of the Clark's Fork district, there is no apparent necessity for stations at intervals more frequent than ten miles, and I would respectfully suggest amendment in this particular, and that the grant of land at stations be limited to sites for depot buildings, wood or coal sheds, and water tanks; and that the limitation for side tracks or switches shall not exceed a limit in width of 60 feet, to cover all trackways, and a length of 500 feet, in lieu of the maximum asked in the bill of 2,000 feet by 400 feet, or about 18 acres of the reservation in each instance; and that the structures erected by said railroad company within the Park shall not in any instance include machine-shops, repair-shops, supply stations, hotels, restaurants, eating-houses, stores, or any building except a depot, including telegraph or telephone office, residence for station agent, and one building for residence of section hands; and said right of way and locations for depot grounds shall not, in any instance, include objects designated as natural curiosities or matters of interest to tourists, or be surrounded or inclosed by fences, walls or hedges, that shall obstruct the view of any contiguous objects, or bar the passage to them of pedestrians or vehicles.

If the purpose of the projectors of this enterprise is fully disclosed in bill 980, their object is not in any degree thwarted by acceptance of amendments suggested in the interest of the people and in furtherance of the views expressed so forcibly in the legislation creating the Park. But the property grants asked for naturally excite distrust, as being those usually sought and accorded in the interest of local trade, progressive enterprise, and the aggregating of population—three conditions that antagonize the letter and spirit of the law establishing the reservation.

If "right of way" is to be granted, I respectfully suggest that it should be "right of way," plain and simple, and so circumscribed as to guard against peopling the Park in the interest of personal or corporate gain or speculation; otherwise it will result at an early day in establishing a condition of affairs that may necessitate abandonment of the original theory of a National Park, or such a contraction of territorial

limits as will surrender to the "Cinnabar and Clark's Fork Railroad Company," and the other corporations in whose interest their bill practically blazes the way, all the lands and settlements in the reservation contiguous to their several lines.

The demand for grants at depots and sidings, of tracts 2,000 by 400 feet in extent, representing areas of 800,000 square feet, or more than 18 acres, in each instance, would, if conceded, enable the company to absorb and control every "oasis" of meadow land through which their line can be twisted or diverted; or, cutting these tracts in center, or diagonally, practically possess a vastly larger number of acres than the grants comprehend, by rendering the other portions of the valleys useless because inaccessible to others. In fact, it is questionable whether any of the valleys of the Park will be more than equal to the demand of a general right of way, 200 feet in width, and a right of way of switches of 400 feet in width. The grant sought would include, and may be intended to include and absorb, the best meadow and grazing lands in the Park referred to by General Sheridan, Geologist Hague, and Special Agent Phillips, in the letters that accompany this report.

Very respectfully,

L. Q. C. LAMAR,
Secretary.

Hon. CHARLES F. MANDERSON,
United States Senate.

HEADQUARTERS ARMY OF THE UNITED STATES,
Washington, D. C., April 7, 1886.

SIR: In reply to your letter of the 9th instant, requesting my views on Senate bill 980, I have to state that I have been at Cooke City on three different occasions. At my last visit, in 1882, the town may have contained about twenty-five people; the mines did not then appear to be very extensive. The railroad from Cinnabar to Cooke City, following the route proposed, will traverse about 45 miles of the Park and be at its (the railroad's) most southern point, the junction of Soda Butte Creek with the East Fork, about 12 miles south of the Park's northern boundary line. Except near the Mammoth Hot Springs, the road will not pass in the immediate vicinity of any of the objects of public interest, but it would pass through some of the best grazing and meadow lands in its northeastern corner.

A railroad through any portion of the Park is, however, not in harmony with the objects for which this reservation was created, and if permitted in this case would, I much fear, be used as a precedent by the advocates of the various other roads already projected through different sections. Under the present circumstances the objects of the Park are being well fulfilled. The game is collecting in large numbers, and if not disturbed will probably continue to do so in the future. These conditions should then, as far as possible, be maintained.

With reference to other lines of railroad communication with Cooke City, that by way of Boulder Creek may prove possible. This route was traversed from the Yellowstone to the Clark's Fork mines by an officer of the Army in 1878, who then reported that he deemed a railroad by this route to be practicable.

Very respectfully, your obedient servant,

P. H. SHERIDAN,
Lieutenant-General.

Hon. H. L. MULBROW,
Acting Secretary of the Interior.

DEPARTMENT OF THE INTERIOR,
Washington, April 6, 1886.

SIR: In reply to your request for information as to the necessity of granting to the Cinnabar and Clark's Fork Railroad the right of way to build a road through the Yellowstone Park, and the effect such a road would have upon the reservation, I take pleasure in laying before you such information as I have gathered, and at the same time presenting my objections to any railway in the Park.

The Clark's Fork mining district lies just outside the northeast corner of the Park. It is situated high up in the mountains, near the headwaters of the Stillwater and Clark's Fork Rivers and Soda Butte Creek. The district is yet small and undeveloped. It may have a brilliant future before it, but however this may be, it has not been satisfactorily demonstrated. Every mining engineer knows that the number of mining locations held has very little to do with the importance of a district. I first visited the district in the autumn of 1883. I again visited the place in September,

1885, and found that the mining developments had progressed far less than I had been led to suppose. So far as I was able to judge, upon careful inquiry, I think there were not more than one hundred miners actively employed in the district, and most of these were doing what is known as prospecting work. In no one mine were there more than three or four men at work. Considerable ore has been taken out, but it is mostly of a very low grade and will have to be smelted in the district. From present developments I fail to see how the Clark's Fork mining district could support a railway.

No careful surveys for railway routes have as yet been made, although much misinformation has been scattered broadcast about the impracticability of reaching the district in any other way than through the Park.

Three routes, however, have been proposed—one by way of Stillwater River, from Stillwater, on the Northern Pacific Railroad; one from Billings, Mont., by way of Clark's Fork; and one by Soda Butte and the Third Cañon of the Yellowstone River, passing through the Yellowstone Park for about 50 miles, nearly the entire length of the road.

It has been stated that the mines are all situated on Soda Butte Creek, and to reach them a railway from the north or east would have to cross a high mountain range. This I consider an error. It should be understood that although Cooke City is situated on Soda Butte Creek, it is only a small settlement and inconveniently located for nearly all the recent mining developments of this district. All the more important of the recent developments are situated either on the opposite side of the watershed on the streams tributary to the Stillwater and Clark's Fork, or else within a few hundred feet of the summit of the range. With a railway a mining town would be equally as well situated on either the Stillwater or Clark's Fork. From all I can learn I am inclined to believe that the route following the valley of the Stillwater will prove practicable. I have not examined it personally, but more accurate surveys have been made of it than of the other lines. I am told that it is feasible to build the road to within 15 miles of Cooke City. It should be borne in mind that all the newest mining locations are from 3 to 6 miles from Cooke City, high up in the mountains. The road would be about 54 miles in length. Stillwater, the junction of the branch road with the Northern Pacific Railroad, is about 125 miles nearer Saint Paul than Cinnabar.

I have personally examined the Clark's Fork Valley for 40 miles east of Cooke City, and I am of the opinion that if the mining interests demand a railway, a road could be built from the mines to Billings, Mont., which would be far more serviceable than a road through the Park. There is on this route one very rugged place known as Clark Fork Cañon, a deep gorge 6 miles in length, but I am told that it is quite possible to avoid it. The route, at least, seems so feasible that accurate surveys should be made before granting a right of way through the Park.

I am well acquainted with the country through which the railway would have to pass in going from Cooke City to Cinnabar. My own work has compelled me to study the Third Cañon carefully, and I have no hesitation in saying that it would be a very costly matter to build the road for 18 or 20 miles from Gardiner to the East Fork of the Yellowstone River. It has been estimated by the friends of the Cinnabar and Cooke City Railway that this road could be built for \$1,000,000. It seems to me that if the output of the mines at Clark's Fork could stand such an expense, either of the other routes should be chosen.

In my opinion there are many persons who are interested in obtaining this right of way through the Park who desire to use the road for the purpose of transporting travelers who annually visit the Park in the summer. Having a right of way, and the only one granted by Congress, they anticipate receiving large revenues derived from tourists. Upon the completion of the road we should see glowing inducements held out to tourists of a railway ride through the Third Cañon of the Yellowstone, and the charming valley of the East Fork. The granting of one or two hundred feet on each side of the track would necessarily include Soda Butte Spring, the water of which is already much sought after by many people, and the only one in the Park which has yet been found to possess curative properties. In my opinion it would be a mistake to allow this spring to pass beyond Government control.

I cannot but believe that the establishment of a railway in the Park would prove a permanent injury to the reservation, and tend to subvert the purposes for which the Park was originally set apart. The danger arising from forest fires would be very great, and the large game would disappear, as it has everywhere else, with the appearance of railways. With a railway in the Park 50 miles in length, with stations every 7 miles, disagreements difficult to settle would immediately arise between a powerful railway corporation and the management of the Park.

A railway means the settlement of large numbers of people living in the Park, over whom the Department would have but little control. It would require constables, justices, and courts, and finally the people would ask for political privileges. It should be the aim of the Department to permit as few people as possible to reside

permanently in the Park other than those engaged in the accommodation of visitors. A railway in the Park is, in my opinion, the beginning of the end. The demand of others claiming equal rights would grow with years, and in time the Park would have to be thrown open to settlement.

By preserving the Park intact for the next ten years it will take such a firm hold upon the country that the people will never consent to its desecration for purely personal ends. It belongs to Maine and Florida quite as much as to Wyoming and Montana, but in time the latter Territories will derive the greatest benefits.

With this letter I inclose a communication from Lieut. D. C. Kingman, in charge of the improvements, Yellowstone National Park. His letter is addressed to the editors of *Forest and Stream*, who kindly furnished me with a copy.

Very respectfully, your obedient servant,

ARNOLD HAGUE,
Geologist.

Hon. L. Q. C. LAMAR,
Secretary of the Interior.

HEADQUARTERS DEPARTMENT OF THE PLATTE,
Engineer's Office, Omaha, Nebr., March 25, 1886.

EDITOR FOREST AND STREAM:

Your favor is received. I am surprised that my report of 1883 should be quoted as in any way favoring the construction of railroads for any purpose whatever within the Yellowstone National Park.

I think this must be a mistake. I have always been opposed to the construction of railroads in the Park. I have given this subject the most careful thought and study, and I should regard their introduction as the most serious injury that could be inflicted on the Park. And the construction of the Cinnabar and Clark's Fork Railroad would be especially deplorable, because it seems so unnecessary.

There is every reason to believe that the route up the Stillwater (lying wholly outside of the Park) is a better one for a railroad to the mines than that via the Yellowstone River and Soda Butte Creek.

DAN. C. KINGMAN,
First Lieutenant of Engineers, in Charge of Improvements, Yellowstone National Park.

WASHINGTON, D. C., April 6, 1886.

DEAR SIR: Understanding that your opinion has been requested by the Senate Committee on Territories through a letter from Senator Manderson, dated April 3, as to the effect of permitting the Clark's Fork and Cinnabar Railroad to penetrate the Yellowstone National Park, with your kind permission, I will state in short why, in my judgment, the enactment of such a law would inflict a serious blow to the interests of the Park.

By the organic act organizing the Park, it was set apart, to constitute forever a great National Park or reservation, for the benefit and enjoyment of the whole people. As expressed in that act, it was to be kept in a state of nature, free from settlement, occupancy, or sale. The only erections to be allowed within its limits were to be such few houses as should be needed for the accommodation of the visiting public. Besides the expressed objects in the act, it is universally conceded that the two main objects attained in the dedication of this wonderful region were the preservation of the great forests within its limits and of the large game of the West, which had been almost exterminated everywhere except in the country proposed to be embraced within the Park.

The objects contemplated by the act have in a great measure been attained. Not only from all portions of this country, but from all portions of the world, the people have come to behold the wonders of nature contained in the Park and to seek escape from the trammels of civilized life surrounding them at home. The main wonder and joy to them has been to behold everything that was beautiful in the Park in a state of nature: that the fair picture contained no blot of man's hand.

By the bill under consideration, all this is proposed to be changed. For the benefit of a private corporation, the pleasure ground of the whole people is to be invaded. Where they used to hear the plaintive cry of the elk will now be heard the shriek of the locomotive. The face of nature is to be scarred with a railroad, and one of the fairest portions of the Park surrendered to a corporation for that purpose, upon which may be erected, in the language of the bill, "station-houses, depots, and machine-shops." This railroad will run 56 miles through the Park, penetrating the wonderful cañons, cutting through the forests, and over the finest grass country in the Park, and pursuing its course along the beautiful Yellowstone River.

That the building of a railroad would be destructive of the beauty of the Park

will be conceded by all. No less clear is it that the project is opposed to the main purposes for which the Park was set apart. Already a railroad reaches the very gate of the Park, and since it has reached that point, they would have it penetrate within "the sacred precincts."

In my report on the Park, made to you last September, and which has been communicated to the Senate and printed as Sen. Ex. Doc. 51, present Congress, I say at page 7: "Interested parties have for some years brought to bear a constant pressure upon Congress and the Department to induce action in favor of a railroad through the Park. This railroad is sought ostensibly for the purpose of bringing to market the ore from Cooke City, a mining camp adjacent to the northeast boundary line of the Park.

If there is one object which should be kept in view more than any other, it is that of preserving the Park as much as possible in a state of nature. A railroad through it would go far to destroy its beauty, and besides it is not demanded by the public. The roads are being improved yearly, and soon will make every portion of the Park easily accessible. The distance between the points of interest is not great, and transportation is good and plentiful.

Apart from the consideration that a railroad is not needed in the Park, and that it would deface its beauty, is the further consideration that the preservation of the game and the forests would be unattainable should a railroad be allowed within the limits of the Park. I think the Department should strenuously oppose the project. And I further observe that the country through which the railroad would run was one much frequented by game, and that if the object of projectors of the railroad was simply to reach Cooke, I was satisfied that object could be practicably attained by a route which would be wholly outside the boundaries of the Park.

It is needless to point out to one of your observation that the game will be utterly driven away from the Park should a railroad be permitted. The road would run through one of the wildest portions of the reservation within which the herd of buffalo, sole remnant of the once mighty herds, now roams.

Nor need I dilate upon the damage to the forests which would result should the bill become a law. Owing to the dryness of the climate during most of the year, forest fires are very easily caused, and once started do immense injury. A railroad would be the means of greatly increasing the danger to the forests from fire.

In the report made at this session of Congress by the House Committee on Expenditures for Indians and Yellowstone Park (Rep. No. 1076, page LIII) it is said, "The preservation of the forests, which clothe with verdure the valleys, rugged declivities, and mountain peaks of the whole region, is of special moment. It is made very clear by the practical and scientific views presented on this subject in the testimony, that the regular flow of water in these regions is greatly dependent on these forests. It is, therefore, in the judgment of the committee, of the highest moment that these forests should be protected from destruction either by fire or the axe. To this extent, having in view at once the beauty of the Park as a delightful resort of the people and the value of the great streams of water that issue from the mountains, as well as the benign influence of the forests on climate and health, this Park should receive the special care of the Government."

Another consideration of importance is that if a railroad is allowed the difficulties which the Department already labors under as to the management of the Park will be greatly increased. It will be impossible to avoid more or less settlement along the line, and the introduction of a large number of people connected with the road. New rules and regulations will have to be made, and when made, with the present force under the superintendent, their enforcement will be very difficult, if not impossible.

In the general views which I have submitted I have not entered particularly into the questions as to the most desirable route to Cooke City, nor as to the value of the private interests proposed to be benefited by the railroad. The people of the whole country are concerned in having the Park preserved for the purposes for which it was originally dedicated, and no considerations of private interests should be allowed to interfere with such preservation.

It is to be regretted that the Committee on Railroads in submitting its report should have been so much influenced by the statements of interested parties.

There is but one opinion, as far as I know, on the subject among the officers of the Government who occupy important positions in the Park, and that is that the granting of the desired right to run the railroad through the Park would be most detrimental to its interests. General Sheridan, who is thoroughly acquainted with the Park, I believe, shares this opinion, and I have grounds for saying would be glad to communicate his views to you when requested. It is to be hoped that the Senate Committee on Territories will give the bill the consideration its importance demands.

Very respectfully, yours,

W. HALLETT PHILLIPS,

Late Special Agent for Investigations in the Yellowstone National Park.

Hon. L. Q. C. LAMAR,
Secretary of the Interior.

DEPARTMENT OF THE INTERIOR,
UNITED STATES GEOLOGICAL SURVEY,
Washington, April 10, 1886.

SIR: I have the honor to acknowledge the receipt of the following letter:

"DEPARTMENT OF THE INTERIOR,
"Washington, April 6, 1886.

"SIR: I inclose copy of Senate bill No. 980, and accompanying report, No. 204, which have been submitted to this Department by the Senate Committee on Territories, and would be glad to have your views upon the following points, based upon your experience and researches in the Yellowstone Park region:

"The estimated distance the proposed road will traverse through the Park.

"The extent and importance of the mining region sought to be reached.

"The population and importance of the two towns sought to be connected.

"Whether, in your opinion, there is any other practicable route for a railroad to the Clark's Fork mining district.

"The comparative length of the two routes, if there are two, and the nature of the obstacles to be overcome.

"Whether there are objects of public interest on the proposed line that may be destroyed or impaired by this location.

"Whether the construction of this road would injuriously affect the Park in any way.

"In conclusion, I would be thankful for any amendments you may care to suggest that will be in the interest of the protection of the Park in the event of the building of this road.

"Very respectfully,

"H. L. MULDROW,
"Acting Secretary.

"Maj. J. W. POWELL,
"Director Geological Survey."

In reply to the above, I have the honor to make the following statement:

Inclosed herewith is a map of a portion of the Yellowstone National Park. It embraces an area extending across the Park from east to west, from the northern boundary southward about 20 miles. It is a photograph mounted on cloth of the manuscript map now in process of construction in this office. The lettering is not yet upon the map, but it will serve the purpose of clearly explaining the route which the proposed railroad must take. The map is on a scale of one mile to the inch; the vertical intervals between contours are 100 feet.

THE YELLOWSTONE ROUTE.

The line of the proposed route through Yellowstone Park is shown upon the map in red ink. It starts at Gardiner, situate on the northern boundary of the Park. The terminus of the Park branch of the Northern Pacific Railroad is at present at Cinnabar, about 3 miles from Gardiner. From Gardiner the line follows up the Yellowstone River to the mouth of the East Fork of the Yellowstone; thence up this stream to the mouth of Soda Butte Creek; thence up this creek to where it passes into a district of country east of the Park, in the neighborhood of the Clark's Fork mining district. The route thus traced through the Park is about 46 miles. The extreme southerly point of the route near the mouth of Soda Butte Creek is a little more than 11 miles from the northern line of the Park. The altitude of Gardiner is about 5,400 feet above the level of the sea; the altitude of a practicable site for the terminus of the road in the mining district would be about 7,500 feet; therefore the altitude to be gained in running from Gardiner to the terminus of the road would be about 2,100 feet, and the length of the line would be from 50 to 55 miles. For 15 miles of its course the construction of the road would be somewhat difficult and expensive, from the fact that the road must run through a narrow and broken cañon. The remaining portion of the road would be of easy construction.

THE STILLWATER ROUTE.

There is a possible railroad route from Stillwater, a station upon the Northern Pacific Railroad, up Stillwater River to its headwaters in the Clark's Fork mining district, but the terminus would not be the same as that by the Yellowstone line, but would have to be on the other side of the "divide." This line would pass up a narrow valley through a number of broken and difficult cañons. The length of the route would be from 65 to 70 miles. The altitude of Stillwater Station is 3,570 feet

above the sea, and the altitude of a practicable terminus of such a route in the mining district would be about 7,500 feet; therefore the altitude to be overcome by such a railroad would be about 3,930 feet. There is no good map of the district of the country through which this line would have to pass, and hence the practicability of its construction can not be affirmed; but it would appear from the knowledge at command that the cost of its construction would greatly exceed that of the line through the Yellowstone Park, and the cost of running after construction would also be greater, from the fact of the greater elevation to be overcome, and also from the fact of its greater length.

THE CLARK'S FORK ROUTE.

There is still another possible route by which this mining district may be reached, namely, that extending from Billings up Clark's Fork, which stream heads in the mining district and gives it its name. The length of this route would be from 125 to 130 miles. Along the route there are a number of cañons presenting obstacles to the road. One cañon especially is said to present great difficulties, and it may be necessary to run the line outside of the cañon along the mountain slopes, in order to overcome this difficulty. The altitude of Billings is 3,115 feet; the altitude of a practicable terminus of this route would be about 7,500 feet, and would not be the same as that for the Yellowstone route or the Stillwater route. The altitude to be overcome by this route would be about 4,385 feet. The Clark's Fork route, therefore, is longer, perhaps presents more difficulties of construction, and a greater elevation has to be overcome. On the other hand, there are some considerations in favor of this route, from the fact that its terminus is farther east on the Northern Pacific Railroad, and from the further fact that along its course valuable deposits of coal are found.

Altogether, the Yellowstone Park route is shorter, can be more cheaply constructed per mile, has less elevation to overcome, and could be maintained and operated at much less expense than either of the other routes.

THE IMPORTANCE OF THE MINING DISTRICT.

No thorough information exists in this office relating to the importance of the mining region at Cooke City. It is known that mineral lodes have been discovered in this district of country, and have been worked to some extent. None of the workings have been extended to great depths, but many small workings have been made, and it is believed that much ore is now piled upon the ground. But the exploitation of the region seems not yet to be sufficient to warrant any expression of opinion in relation to the ultimate extent of the mining industries that may be developed therein. The early discoveries were on the head of Soda Butte Creek; later discoveries are on the head of the Stillwater and the head of Clark's Fork. The most important mine is the "Great Republic," which now has much low-grade ore on the dump-pile. Cooke City is a small settlement at the center of the mining district. If a railroad be built by any one of the routes its terminus will probably be lower down, and a new town will thus probably be established.

THE IMPORTANCE OF GARDINER.

Gardiner is situated on the Yellowstone River about five miles from the Mammoth Hot Springs on the north line of the National Park. It is a small settlement of log cabins and frame shanties. It derives its trade at present from the settlers living in the valley and from people visiting the Park. Cinnabar, the present terminus of the Park branch of the Northern Pacific Railroad, is about three miles away.

With regard to the effect which such a railroad would have upon the interests of the Park, the director does not feel that he is entitled to express an opinion.

I am, with great respect, your obedient servant,

J. W. POWELL,
Director.

The SECRETARY OF THE INTERIOR.

We do not attach the voluminous extracts from the Forest and Stream, and the maps referred to in the letter of the Secretary of the Interior, fearing that this report may be of too great length, but return them to the files of the Senate that they may be considered and given the weight that their importance demands.

We also file clippings from the Spirit of the Times and other newspapers, showing the view taken by an observing public of this projected railroad.

Upon the proposition that there is an available railroad route from the Northern Pacific Railroad to the Clark's Fork mining district by way of the Stillwater River, we file with the Secretary of the Senate a map showing that route. This map was prepared by a civil engineer of the town of Billings, Mont., who made personal exploration of the route, and reports as follows:

BILLINGS, MONT., *February 20, 1886.*

With the town of Stillwater as the initial point and Henderson Mountain as the terminus, the length of the railroad would be only 56 miles, with no heavy work, and comparatively very light gradients and curvature. I think that the average cost per mile should be less than \$4,000. The only heavy work will be at the cañon, 41 miles from the mouth of the river, where there will be a rock cut possibly of 4,000 cubic yards. From the mouth of the river up to this point there is only light work, and above it, while there will be some rock work, there will be nothing that could be classed as heavy work.

The grade from Stillwater up to the cañon, distance 41 miles, will not exceed 80 feet per mile; from the Forks to Henderson Mountain, unless some distance be made by first running a short way up to the East Fork and then doubling back and going up the West Fork to the grade, will exceed this somewhat.

This route, having no divide to cross, will haul all of its heavy freights, for its entire length, with the assistance of gravity.

The topography of the valley is such that all of the places where the snow drifts along the route, the road, at very small cost, can be kept above ground and so avoid all danger of snow blockades.

The route will develop the Rosebud, West Rosebud, Fishtail, and Boulder mineral, coal, and agricultural lands.

The Stillwater Valley for 23 miles has an average width of over a mile, from which point it contracts to three-quarters of a mile for a distance of 8 miles, after which it expands again to 1 mile for a distance of 10 miles. Above this, though the valley is generally contracted, there are several tracts of valley land comprising two or three hundred acres. This valley land is all fertile agricultural land, laying well for irrigation. The bench lands grow luxuriantly the best grazing grasses. I have explored the Yellowstone and Musselshell, and think these benches have as good stand of grass as the latter, while in water they far excel them.

The developed mineral lands of the valley extend from Henderson Mountain to Gallatin County. There are indications of coal all along the valley, well timbered for mining purposes.

From a late letter from the present efficient superintendent of the Park, we extract the following, showing the danger to the timber in the Park from the construction of railroads within its limits:

Another material point is the spread of fires from the locomotives. This country is so high and dry that it would be impossible to prevent the firing of the Park, and in less than three years' time there would scarcely be a green tree on the headwaters of the Yellowstone, to say nothing of the Park. Last fall I extinguished sixty-odd fires, resulting from the carelessness of campers, and the railroad would be an hundred times worse. To save the timber on the headwaters of the Yellowstone, Missouri, and Columbia Rivers should be of itself sufficient to prevent the granting of the right of way to any railroad company.

For the numerous reasons herein presented, we believe the bill under consideration should not pass.

CHARLES F. MANDERSON.
BENJ. HARRISON.
GEO. GRAY.



